

The GEWEX Regional Hydroclimate Projects in High Mountainous Terrains: Barriers that Bridge

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The Global Energy and Water EXchanges Project (GEWEX) of the World Climate Research Programme focuses on in particular process understanding of how water and energy manifest themselves in the earth system. To address the science at a more regional level the Regional Hydroclimate Projects (RHPs) provide a unique opportunity to bring better the scientific community and rally around those issues that are specific and relevant to the region. High mountainous regions of the world provide a unique challenge both in terms of observations as well as modeling. At the same time these regions are of crucial importance to our water resources and the live stream to the major part of the global population. Better understanding of the processes in these regions under climate and environmental change is of the essence to provide for sustainable solutions. These mountainous regions act not only as physical barriers but also link communities as they provide the (water) resources they depend upon. At the same time these regions are also more vulnerable and strongly impacted by climate change. The GEWEX Regional Hydroclimate Projects in the various mountain regions of the world can help bridge the knowledge gap and expertise and as such translate global environmental change to local change and impacts.